

Procedures for Diarrhea (liquid stool) fecal accidents.

In the event of a Fecal Accident in a Swimming Pool, immediately initiate the following:

Diarrheal (liquid stool)

1. Close the pool into which water is circulating that contains the feces.
2. Remove as much feces with a net or scope and dispose into commode. Clean the net or scoop and leave in pool during the disinfection procedure. Do not vacuum stool from the pool.
3. Raise the free available chlorine concentration to 20 mg/L and maintain the pH between 7.2 and 7.5. Ensure this concentration is found throughout all co-circulating pools by sampling at least three widely spaced locations away from return water outlets. This should be maintained for at least 8 hours, equivalent to a CT inactivation value of 9600. A higher or lower free available chlorine level/inactivation time can be used as long as a CT inactivation value equaling 9600 is maintained. You may need higher free available chlorine levels in the presence of chlorine stabilizers such as chlorinated isocyanurates. If necessary, consult an aquatics professional to determine and identify the feasibility, practical methods, and safety considerations before attempting the hyperchlorination of any pool. Adjustment of water chemistry can damage your pool or equipment and should be performed only by an experienced professional.
4. Ensure that the filtration system is operating while the pool reaches and maintains the proper free available chlorine concentration during disinfection.
5. Backwash the filter thoroughly after reaching the CT value. Be sure the effluent is discharged directly to waste and in accordance with state or local regulations. Do not return the backwash through the filter. Where appropriate, replace the filter media.
6. Swimmers may be allowed into the pool after the required CT value has been achieved and the free available chlorine level has been returned to the normal operating range allowed by the state or local regulatory authority. Maintain the free available chlorine concentration and pH at standard operating levels based on state or local regulations. If necessary, consult state or local regulatory authorities for recommendations on bringing the free available chlorine levels back to an acceptable operating range.
7. Document each fecal accident in the pool log by recording date and time of the event, whether the accident involved formed stool or diarrhea, free available chlorine concentration at the time of event and before opening the pool, the pH, the procedures followed to respond to the fecal accident (including the process to increase free chlorine residual if necessary), and the contact time.

Navajo County Health
Department

Procedures for Fecal Accidents in Swimming Pools



*In Service to the citizens of
Navajo County*

Navajo County Health Department

**Holbrook (928) 524-4750 Ext 27
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What should I do in the event of a Fecal Accident in my Pool?

The emergence of pathogenic organisms such as *E. coli* and *Cryptosporidium*, and the association of these organisms with recent serious outbreaks of illness following fecal accidents require the swimming pool operator to have an effective policy on how to handle fecal accidents when they occur.

The Navajo County Health Department advises that the following precautionary measures be taken by swimming pool owners and operators to minimize the risk of disease transmission to bathers. Please note the different procedures required for a Formed stool accident compared to Diarrhea (liquid stool).

In the event of a Fecal Accident in a Swimming Pool, immediately initiate the following:

Formed Stool (solid, nonliquid)

1. Close the pool into which water is circulating that contains the feces.
2. Remove as much feces with a net or scope and dispose into commode. Clean the net or scoop and leave in pool during the disinfection procedure. Do not vacuum stool from the pool.
3. Raise the free available chlorine concentration to 2 mg/L, pH 7.2-7.5 if it is less than 2.0 mg/L. Ensure this concentration through out all co-circulating pools by sampling at least three widely spaced locations away from return water outlets. This free available concentration requires pool closure for approximately 30 minutes. Other concentrations or closure times can be used as long as the CT inactivation value is kept constant. (CT refers to concentration of free available chlorine in mg/L or ppm multiplied by time (T) in minutes. See Table 1 in the next column for the Time and Concentration combinations. Table 1 is in reference to Formed Stool fecal accidents).
4. Maintain the free available chlorine concentration at 2.0 mg/L, pH 7.2—7.5, for at least 25 minutes before reopening. Ensure that the filtration system is operating while the pool reaches and maintains the proper free available chlorine concentration during the disinfection process.
5. Document each fecal accident in the pool log by recording date and time of the event, whether the accident involved formed stool or diarrhea, free available chlorine concentration at the time of event and before opening the pool, the pH, the procedures followed to respond to the fecal accident (including the process to increase free chlorine residual if necessary), and the contact time.

Table 1. Free available chlorine concentration and pool closure time required for disinfection after a formed stool fecal accident

Concentration (mg/L or ppm)	Pool closure time (minutes)
<0.4	106
0.6	72
0.8	55
1.0	45
1.2	39
1.4	34
1.6	30
1.8	28
2.0	25
2.2	24
2.4	22
2.6	21
2.8	20
3.0	19

For additional information, please contact your
Navajo County Health Department:

Holbrook Office: (928) 524-4750 Ext. 27

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